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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,140	02/14/2002	Paul Durrant	5681-10800	6877

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EXAMINER

DUNCAN, MARC M

ART UNIT

PAPER NUMBER

2113

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,140

Applicant(s)

DURRANT ET AL.

Examiner

Marc M Duncan

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-22, 25-29 and 31 is/are rejected.
- 7) ☒ Claim(s) 23, 24 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

FINAL REJECTION

Status of the Claims

Claims 18-22, 25-29 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Mori.

Claims 23-24 and 30 are objected to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 18-22, 25-29 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Mori.

Regarding claim 18:

Mori teaches a processor in Fig. 1, 2 and 6. The controllers and the enclosure service device are all processors.

Mori teaches a memory in Fig. 1. A hard drive is a memory.

Mori teaches a first device in Fig. 1. The loop is a first device.

Mori teaches a device driver being operable to monitor an operational status of the first device in Fig. 5. A loop fault is a change in operational status.

Mori also teaches, consequent upon a change in said operational status, to generate fault report data indicating whether the change of operational status of the first device was caused internally within the first device or externally by another device connected to the first device in col. 6 line 31-col. 7 line 38. When the loop fault occurs, the loop is tested to see if the fault occurred within the loop. If the fault did not occur within the loop, it is determined that the fault occurred external to the loop. Fault report data is represented by any signal that confirms where the fault occurred.

Regarding claim 19:

Mori teaches wherein the fault report data includes an indication of an operational status of the device in col. 6 lines 36-40. It is determined whether or not the loop fault occurs with the HDDs that make up the loop.

Regarding claim 20:

Mori teaches wherein, if said fault report data indicates that said change of status was caused externally, said device driver is operable to generate fault direction information indicative of a connection from which the external fault is perceived in col. 6 line 52-col. 7 line 38. It is determined from which enclosure service device the fault occurred. This is equivalent to the claim limitation of generating fault direction information indicative of a connection from which the external fault is perceived.

Regarding claim 21:

Mori teaches wherein the operational status of the first device is one of: up, indicating no fault, degraded, indicating that the first device is still operational but with impaired performance, or down, indicating that the first device is not operational in Fig.

Art Unit: 2113

5 and col. 6 lines 31-51. The loop is determined as either faulty or not faulty, which is equivalent to determining up or down.

Regarding claim 22:

Mori teaches wherein the operational status of the first device is determined from at least one of: a time to respond to a command, an amount of data communicated via an I/O bus, an amount of data processed by the first device, whether information is being correctly processed, or from an error interrupt signal generated by the first device in col. 6 lines 31-51. If a loop fault is determined, the information is not being correctly processed.

Regarding claim 25:

The claim is rejected as the method of using the apparatus of claim 18.

Regarding claim 26:

The claim is rejected as the method of using the apparatus of claim 19.

Regarding claim 27:

The claim is rejected as the method of using the apparatus of claim 20.

Regarding claim 28:

The claim is rejected as the method of using the apparatus of claim 21.

Regarding claim 29:

The claim is rejected as the method of using the apparatus of claim 22.

Regarding claim 31:

The claim is rejected as the computer program product that causes the method of claim 25 to be performed.

Allowable Subject Matter

Claims 23-24 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art was not found that explicitly teaches or fairly suggests wherein said device driver is operable to generate environment data representative of at least one parameter value of at least one sensor associated with a device, a group of devices or a Field Replaceable Unit (FRU) containing one or more devices as outlined in claims 23 and 30. Prior art was not found that explicitly teaches or fairly suggests wherein said device driver generates said operational status information from at least one of a number of memory accesses performed, a time taken to respond to a command, and an amount of data processed as outlined in claim 24.

Response to Arguments

Applicant's arguments filed 11/22/04 have been fully considered but they are not persuasive.

In response to applicant's arguments that Mori does not monitor an operational status of the first device, the examiner respectfully disagrees. As seen in the above citations, Mori monitors the status of the FC loop, which is the first device.

In response to applicant's arguments that Mori does not teach generating fault report data, the examiner respectfully disagrees. Under the broadest reasonable interpretation, fault report data is any data that signals a fault and give any sort of

information as to the nature of the fault. Such data is clearly present in Mori. The statement that the data can be used to analyze faults in systems that are more complex is completely irrelevant. There is no claim language to differentiate the fault report data from any type of data or signal that notifies the occurrence or circumstances of a fault.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc M Duncan whose telephone number is 571-272-3646. The examiner can normally be reached on M-T and TH-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2113

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md


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